

Virological Surveillance Summary

In the Western Pacific Region, the following influenza viruses predominated:

Table 1: Predominant influenza viruses, Western Pacific Region, 2015 to week 13 2016

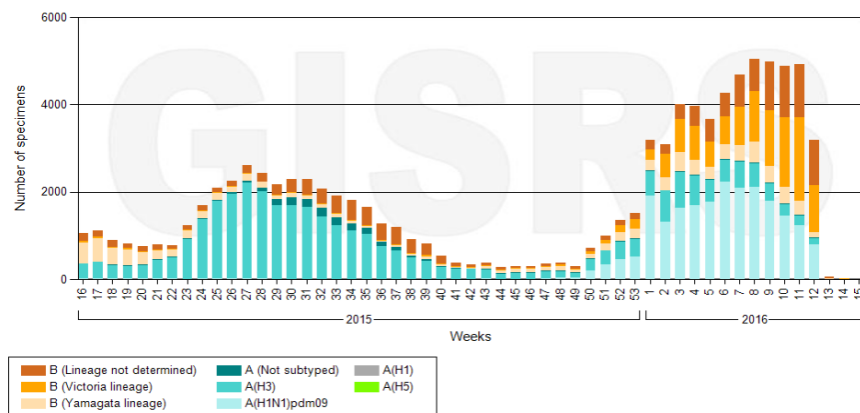
Year	Week	Predominant viruses
2015	1-9	A (H3)
	10-16	B (Yamagata lineage), B (lineage not determined)
	17-19	B (Yamagata lineage), A (H3)
	20-37	A (H3)
	38-42	A (H3), B (lineage not determined)
	43-51	Influenza virus activity is low in all subtypes
	52-53	A (H3), A (H1N1) pdm09
2016	1-13	A (H1N1) pdm09

The number of specimens provided to FluNet by each of the Western Pacific Region countries that reported between week 1 and week 13, and proportion of all specimens contributed by each country is presented in the table below.

Table 2: Countries providing specimens for FluNet, Western Pacific Region, weeks 1 to 13, 2016

Country	Total
Cambodia	315
China	185519
Lao People's Democratic Republic	1017
Mongolia	2029
New Caledonia	337
Philippines	361
Republic of Korea	2979
Singapore	684
Viet Nam	116
Papua New Guinea	285

Figure 1: Number of specimens positive for influenza by subtype and week, Western Pacific Region, 2015-16 (accessed 12 April 2016)



Influenza surveillance summary

Influenza surveillance in the WHO Western Pacific Region is based on outpatient and inpatient sentinel surveillance systems. Case definitions, populations under surveillance and data formats differ among these countries. This influenza surveillance summary includes countries where routine surveillance is conducted and information is available from syndromic surveillance systems for Influenza-like-illness (ILI) and Severe Acute Respiratory Infections (SARI).

The [WHO surveillance case definition](#) for ILI is an acute respiratory infection with a measured fever of $\geq 38^{\circ}\text{C}$ and cough, with symptom onset within the last 10 days. For SARI, it is an acute respiratory infection with a history of fever or measured fever of $\geq 38^{\circ}\text{C}$ and cough, with symptom onset within the last 10 days and requires hospitalization.

Countries in the temperate zone of the Northern Hemisphere

In most countries within the temperate zone of the Northern Hemisphere, ILI and influenza activity remained at low levels.

Outpatient ILI Surveillance

China (North)

In week 13 2016, ILI activity decreased slightly but is still high compared to previous years. The proportion of hospital visits that were for ILI at national sentinel hospitals in north China in week 13 was 3.7%, compared to 4.0% in week 12 of 2016, and 2.9% and 2.6% in the corresponding weeks of 2014 and 2015 respectively (Figure 2).

Mongolia

In week 13, 2016, ILI activity in Mongolia continued to decrease (Figure 3).

Republic of Korea

In week 14, 2016, the rate of ILI patient visits to sentinel physicians continues to increase (32.0 /1,000 outpatients). This trend is similar to that in last year (2014-2015). (Figure 4).

China (North)

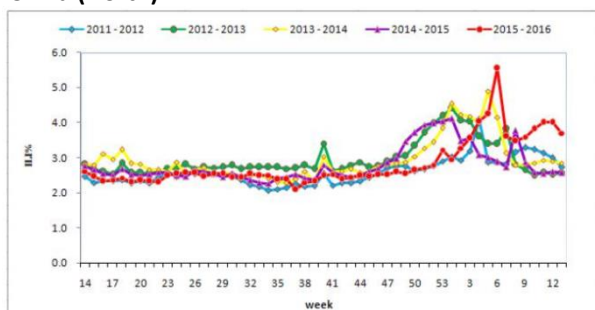


Figure 2: Percentage of visits for ILI at sentinel hospitals, 2011-2016 (Source: China National Influenza Center)

Mongolia

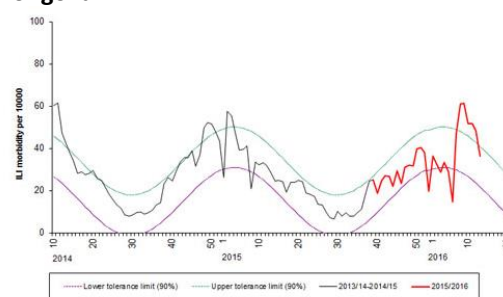


Figure 1.1.1. Countrywide

Figure3: Proportion of outpatients that were ILI (per 10,000 people), 2013-2016 (Source: Mongolia National Influenza Center)

Republic of Korea

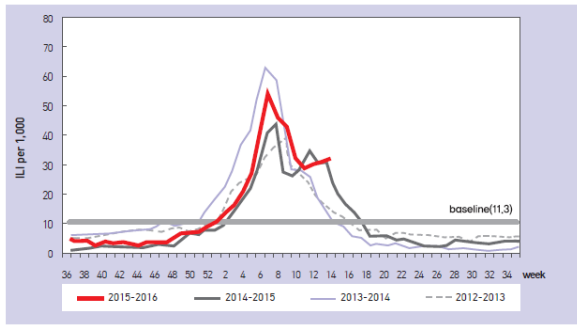


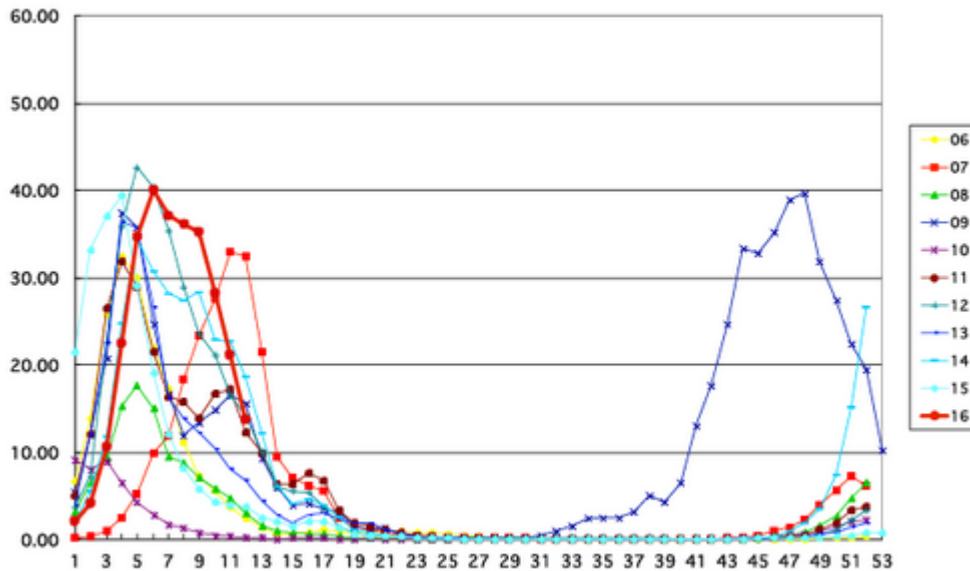
Figure 4: Weekly proportion of ILI visits per 1,000 patients 2012-2016 (Source: Korean Centre for Disease Control and Prevention)

Sentinel influenza surveillance

Japan

As of 6 April 2016, the number of influenza cases reported weekly per sentinel hospital site continued to decrease in line with the seasonal pattern (**Error! Reference source not found.**).

Figure 5: Number of influenza cases reported weekly per sentinel hospital site, Japan 2006-2016 (Source: Japan National Institute of Infectious Diseases)



Countries/areas in the tropical zone

In weeks 1 to 14 of 2016, ILI or Acute Respiratory Infection (ARI) activity followed previous seasonal trends in countries/areas in the tropical zone.

Outpatient Surveillance

Hong Kong (China) - ILI Surveillance

During week 14, overall influenza activity remained at a high level. The average consultation rate for influenza-like illness (ILI) among sentinel general outpatient clinics was 8.2 ILI cases per 1,000 consultations, compared to 9.0 per 1,000 recorded in the previous week (Figure 6).

The average consultation rate for ILI among sentinel private doctors was 68.2 ILI cases per 1,000 consultations, increased from 58.9 per 1,000 recorded in the previous week (Figure 7).

The percentage of respiratory specimens in week 14 which tested positive for seasonal influenza viruses was 18.6%, slightly lower than that recorded in the previous week (21.3%). Of all respiratory specimens tested in week 14, 979 (18.6%) tested positive for seasonal influenza viruses, including; 365 (6.9%) influenza A (H1), 30 (0.6%) influenza A (H3), 560 (10.6%) influenza B and 24 (0.5%) influenza C.

China (South) - ILI Surveillance

During week 13, the percentage of outpatient or emergency visits for ILI at national sentinel hospitals in south China was 4.0%, lower than the previous week (4.1%), and was higher than the corresponding weeks of 2014 and 2015 (3.0% and 2.5% respectively) (Figure 8). In South China, influenza B was the predominant type of influenza detected (72.6%). Of the influenza B subtypes, B Victoria was the most common (77.1%).

Singapore – ARI Surveillance

The average daily number of patients seeking treatment in polyclinics for ARI decreased from 2,596 (over 4.5 working days) in week 12 to 2,530 (over 5.5 working days) in week 13 (Figure 9). The proportion of patients with influenza-like illness (ILI) among the polyclinic attendances for ARI remained low at approximately 1%. The overall prevalence of influenza among ILI samples (n=198) in the community was 54.5% in the past 4 weeks. Of specimens that tested positive for influenza in March 2016, 72.9% were positive for influenza B, 21.4% for influenza A (H1N1) pdm09, and 5.7% for influenza A (H3N2).

Hong Kong (China) - ILI Surveillance

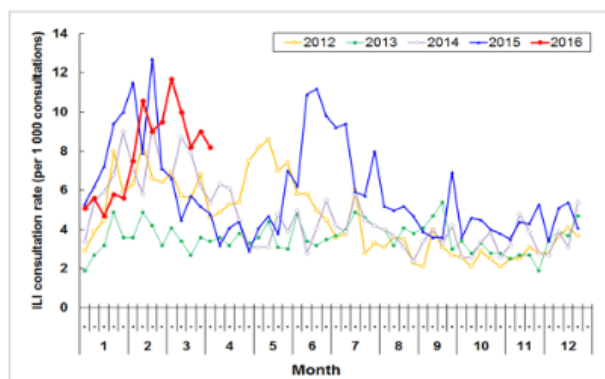


Figure 6: ILI consultation rates at sentinel general outpatient clinics, Hong Kong 2012-2016 (Source: Hong Kong Centre for Health Protection)

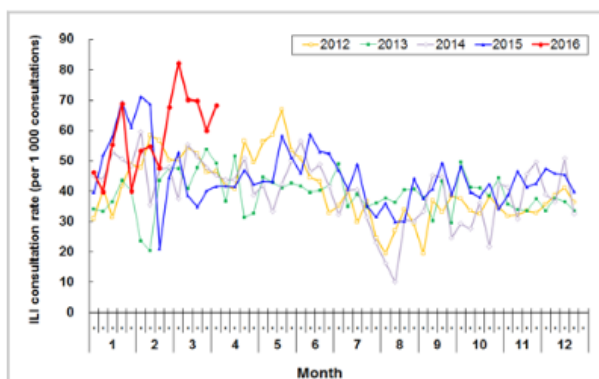


Figure 7: ILI consultation rates at sentinel private doctors, Hong Kong 2012-2016 (Source: Hong Kong Centre for Health Protection)

China (South) - ILI Surveillance

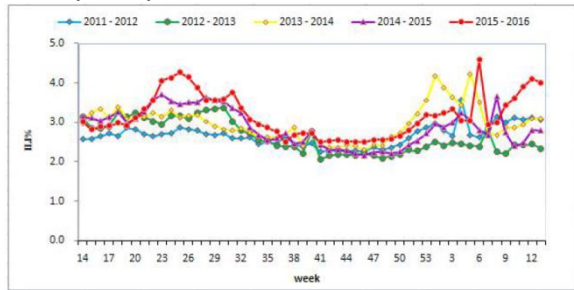


Figure 8: Percentage of visits due to ILI at national sentinel hospitals in South China, 2011-2016 (Source: China National Influenza Center)

Singapore - ARI Surveillance

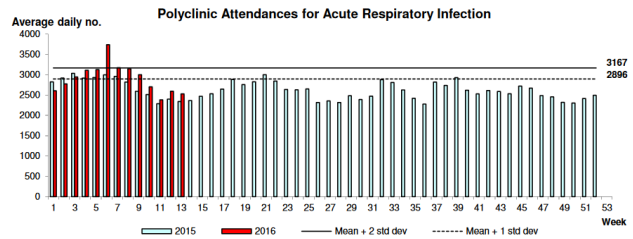


Figure 9: Average daily polyclinic attendances for Acute Respiratory Infection, Singapore 2015-2016 (Source: Singapore Ministry of Health)

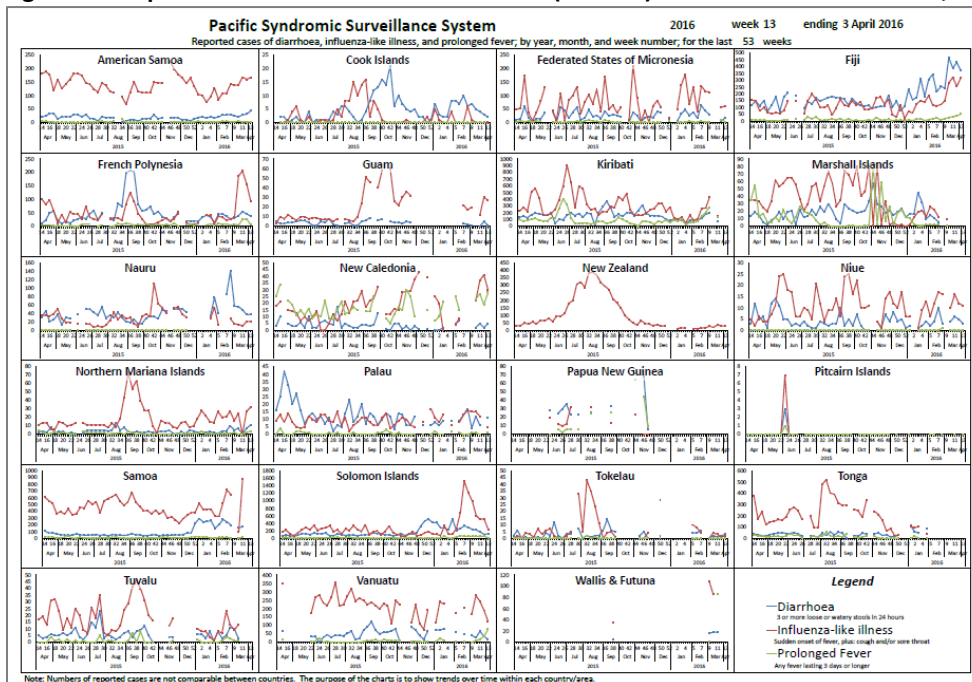
Countries in the temperate zone of the southern hemisphere

Influenza surveillance data from Australia and New Zealand is reported during their influenza season and will not be updated in this report unless unusual activity is apparent.

Pacific Island Countries and Areas (PICs)- ILI Surveillance

In the Pacific Island Countries and Areas, in week 13, the number of ILI cases reported is higher than the previous weeks in American Samoa, Fiji, Kiribati, Northern Mariana Islands, Samoa and Tuvalu. (Figure 10)

Figure 10: Reported cases of influenza-like illness (red line) in Pacific Island Countries, 2015–2016



Note: Numbers of reported cases are not comparable between countries. The purpose of the charts is to show trends over time within each country/area.

Global influenza situation updates

Epidemiological update:

http://www.who.int/influenza/surveillance_monitoring/updates/2016_04_04_surveillance_update_260.pdf?ua=1

Virological update:

http://www.who.int/influenza/gisrs_laboratory/updates/summaryreport/en/

Global update:

http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/

Others:

Recommended composition of influenza virus vaccines for use in the 2016 southern hemisphere influenza season

http://www.who.int/influenza/vaccines/virus/recommendations/2016_south/en/

Antigenic and genetic characteristics of zoonotic influenza viruses and candidate vaccine viruses developed for potential use in human vaccines

http://www.who.int/influenza/vaccines/virus/characteristics_virus_vaccines/en/

4th WHO Informal Consultation on Improving Influenza Vaccine Virus Selection

http://www.who.int/influenza/gisrs_laboratory/updates/summaryreport

Video on influenza on WHO's YouTube Channel

Arabic: <https://www.youtube.com/watch?v=PxW6Pq1AnwI>

Chinese: <https://www.youtube.com/watch?v=xW9gDKEpitQ>

English: <https://www.youtube.com/watch?v=yhhJft86Bgg>

French: <https://www.youtube.com/watch?v=8mo8rWWJZkc>

Russian: <https://www.youtube.com/watch?v=XQO6nbkKUWQ>

Spanish: <https://www.youtube.com/watch?v=qXr75cKxwTY>